CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/BHS/BC/Bitumen/2014-15 12.02.2015

GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

As Per IS 2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. B.H. Shivakumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements of Nanjappa circle in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/BBMP/VSD/PR/643/2014-15 Dated: 09.02.2015
SAMPLE I/D	Roads at Nanjappa circle in Ward No.09, BBMP, Bangalore.
DATE OF TESTING	12.02.2015

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	47.25	9.97	9.97	90.03	79-100
9.5	33.26	7.02	16.99	83.01	70-88
4.75	83.25	17.56	34.55	65.45	53-71
2.36	90.21	19.03	53.58	46.42	42-58
1.18	42.58	8.98	62.56	37.44	34-48
0.6	32.15	6.78	69.35	30.65	26-38
0.3	28.15	5.94	75.28	24.72	18-28
0.15	39.64	8.36	83.65	16.35	12-20
0.075	50.26	10.60	94.25	5.75	4-10

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	52.64	11.12	11.12	88.88	79-100
9.5	33.21	7.01	18.13	81.87	70-88
4.75	73.22	15.46	33.59	66.41	53-71
2.36	95.65	20.20	53.80	46.20	42-58
1.18	40.58	8.57	62.37	37.63	34-48
0.6	35.24	7.44	69.81	30.19	26-38
0.3	26.51	5.60	75.41	24.59	18-28
0.15	35.24	7.44	82.85	17.15	12-20
0.075	52.65	11.12	93.97	6.03	4-10

AE-9

Note:

- This test report should not be reproduced except in full, without written approval of the laboratory
- The results indicated above are based on the tests carried out on the samples received in the laboratory
- Any Query regarding the report must be reported within 15 days from the date of testing

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/BHS/BC/Bitumen/2014-15 12.02.2015

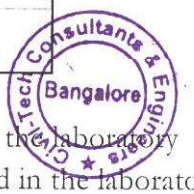
BITUMEN CONTENT DETERMINATION OF BITUMINOUS CONCRETE MIX

As Per IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. B.H. Shivakumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements of Nanjappa circle in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/BBMP/VSD/PR/643/2014-15 Dated: 09.02.2015
SAMPLE I/D	Roads at Nanjappa circle in Ward No.09, BBMP, Bangalore.
DATE OF TESTING	12.02.2015

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g.	474	473.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	26	26.50
7. Bitumen content in %	5.20	5.30
8. Average	**5.25**	



Note:

Þ This test report should not be reproduced except in full, without written approval of the laboratory

Þ The results indicated above are based on the tests carried out on the samples received in the laboratory

Þ Any Query regarding the report must be reported within 15 days from the date of testing

AE-9

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/BHS/BM/Bitumen/2014-15 11.02.2015

GRADATION DETERMINATION OF BITUMINOUS MACADAM MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. B.H. Shivakumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements of Nanjappa circle in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/BBMP/VSD/PR/643/2014-15 Dated: 09.02.2015
SAMPLE I/D	Roads at Nanjappa circle in Ward No.09, BBMP, Bangalore.
DATE OF TESTING	11.02.2015

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	29.12	6.04	6.04	93.96	90-100
13.2	90.26	18.71	24.74	75.26	56-88
4.75	259.6	53.80	78.55	21.45	16-36
2.36	45.28	9.38	87.93	12.07	4-19
0.3	15.24	3.16	91.09	8.91	2-10
0.075	10.25	2.12	93.21	6.79	0-8

AE-9

Þ The results indicated above are based on the tests carried	Trail 2				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	30.12	6.25	6.25	93.75	90-100
13.2	94.25	19.55	25.80	74.20	56-88
4.75	261.5	54.25	80.06	19.94	16-36
2.36	48.52	10.07	90.12	9.88	4-19
0.3	16.59	3.44	93.56	6.44	2-10
0.075	9.85	2.04	95.61	4.39	0-8

Note:

Þ This test report should not be reproduced except in full, without written approval of the laboratory.

Þ The results indicated above are based on the tests carried out on the samples received in the laboratory.

Þ Any Query regarding the report must be reported within 15 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/BHS/BM/Bitumen/2014-15 11.02.2015

BITUMEN CONTENT DETERMINATION OF BITUMINOUS MACADAM MIX

AS per IRC:SP:-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. B.H. Shivakumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements of Nanjappa circle in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/BBMP/VSD/PR/643/2014-15 Dated: 09.02.2015
SAMPLE I/D	Roads at Nanjappa circle in Ward No.09, BBMP, Bangalore.
DATE OF TESTING	11.02.2015

CIVIL ENGINEERING TESTING LABORATORY www.civiltechconsultants.com

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	482.5	482
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	17.5	18.00
7. Bitumen content in %	3.50	3.60
8. Average	**3.55**	

Civil-Tech Consultants & Engineers Bangalore

Note:

- This test report should not be reproduced except in full, without written approval of the laboratory
- The results indicated above are based on the tests carried out on the samples received in the laboratory
- Any Query regarding the report must be reported within 15 days from date of testing.

AE-9

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

This document was created with Win2PDF available at http://www.win2pdf.com.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.
This page will not be added after purchasing Win2PDF.